

REMARKS/ARGUMENTS

The Office Action mailed June 16, 2008 has been received and the Examiner's comments carefully reviewed. Claims 12-19 and 44-55 are rejected. Claims 12, 44 and 50 have been amended. For at least the following reasons, Applicants respectfully submit that the pending claims are in condition for allowance.

Interview August 12, 2008

Applicants thank the Examiner for the courtesy of the telephone conference on August 12, 2008. The independent claims as amended were discussed with regard to the cited references. Specifically the Examiner indicated that the proposed amendment appeared to overcome the current rejection.

Claim Rejections

Claims 12-19, 44-55 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The Applicants have amended the claims to address the rejection and respectfully request the rejection be withdrawn.

Claims 12-17, 19, 44-45, 47, 50-51, 55 were rejected under 35 U.S.C. 103(a) as being unpatentable by Lorang et al (US 5,548,814) in view of Chadwick (US 5,168,271). Claim 18 was rejected under 35 U.S.C. 103(a) as being unpatentable by Lorang in view of Chadwick, and further in view of Cox (US 5,732,333). Claim 46 was rejected under 35 U.S.C. 103(a) as being unpatentable by Lorang in view of Chadwick, and further in view of Campana (US 6,567,397). Claims 48-49, 52-53 were rejected under 35 U.S.C. 103(a) as being unpatentable by Lorang in

view of Chadwick, and further view of Weng (US 4,856,003). Claim 54 was rejected under 35 U.S.C. 103(a) as being unpatentable by Lorang in view of Chadwick, and further in view of Misaizu (US 5,487,089). The Applicants have amended the claim to address the rejection and respectfully request the rejection be withdrawn.

As amended, Claim 1 recites in part “an encoding engine coupled to said input-output controller, said control processor, and to a first memory; wherein the encoding engine: encodes a plurality of extracted data packets into a first portion of encoded data streams for transmission at a first latency and a second portion of encoded data streams for transmission at a second latency, wherein the second latency is lower than the first latency; and interleaves the first and second portions of encoded data streams over a broadcast frame that includes sub frames, wherein: each sub frame includes data associated with the first portion and data associated with the second portion, interleaved together, and each of the extracted data packets associated with the first portion is interleaved across multiple subframes.” In contrast, none of the cited references teach an encoder that interleaves portions of different latencies into a broadcast frame.

For example, the Office Action states “Regarding claim 12, Lorang discloses a broadcast transmitter (see Fig. 8, base station 200 or Fig. 5 regarding paging stick 20), comprising: . . . an encoding engine coupled to said input-output controller, said control processor, and to a first memory (see Fig. 10 regarding baseband processor components of a M x device), wherein one skilled in the art would recognize that the transceiver of the base station 200 would obviously comprise components similar to the transceiver components of the PDU in order to encode data for transmitting encoded data to the PDUs.” (Office Action, pages 3-4).

Lorang, however, does not teach an encoding engine that encodes portions of a first latency and a second latency within a broadcast frame that includes subframes. For example, the Office Actions cites to the baseband processor components of Lorang. These processor components do not encode data frames with different latencies or interleave portions together. Accordingly, Lorang does not teach the encoding engine as described in Applicants' amended claims 1.

The other cited references do not cure the deficiencies of Lorang. For example, Chadwick does not teach an encoding engine that encodes data packets for transmission at two latencies or an encoding engine that interleaves portions into a broadcast frame that includes sub frames. Chadwick does not teach such an encoding engine. Chadwick makes no reference of interleaving portions of different latencies or encoding data at different latencies into a broadcast data frame.

Since none of the cited references teach "an encoding engine coupled to said input-output controller, said control processor, and to a first memory; wherein the encoding engine: encodes a plurality of extracted data packets into a first portion of encoded data streams for transmission at a first latency and a second portion of encoded data streams for transmission at a second latency, wherein the second latency is lower than the first latency; and interleaves the first and second portions of encoded data streams over a broadcast frame that includes sub frames, wherein: each sub frame includes data associated with the first portion and data associated with the second portion, interleaved together, and each of the extracted data packets associated with the first

portion is interleaved across multiple subframes, Claim 12 is proposed to be allowable. Claims 2-10 are proposed to be allowable as they depend from a valid base claim.

As amended, Claim 44 recites in part “means for converting the encoded data to FM subcarrier baseband signals; wherein the encoding engine: encodes a plurality of extracted data packets into a first portion of encoded data streams for transmission at a first latency and a second portion of encoded data streams for transmission at a second latency, wherein the second latency is lower than the first latency; and interleaves the first and second portions of encoded data streams over a broadcast frame that includes sub frames, wherein: each sub frame includes data associated with the first portion and data associated with the second portion, interleaved together, and each of the extracted data packets associated with the first portion is interleaved across multiple subframes.” For at least the reasons presented above, Claim 44 is proposed to be allowable. Claims 45-49 are proposed to be allowable as they depend from a valid base claim.

As amended, Claim 50 recites in part “an encoding engine that is coupled to the input-output controller and the control processor, wherein the encoding: encodes a plurality of extracted data packets into a first portion of encoded data streams for transmission at a first latency and a second portion of encoded data streams for transmission at a second latency, wherein the second latency is lower than the first latency; and interleaves the first and second portions of encoded data streams over a broadcast frame that includes sub frames, wherein: each sub frame includes data associated with the first portion and data associated with the second portion, interleaved together, and each of the extracted data packets associated with the first portion is interleaved across multiple subframes such that an output image is produced;.” For at

least the reasons presented above, Claim 50 is proposed to be allowable. Claims 51-55 are proposed to be allowable as they depend from a valid base claim.

Conclusion

In view of the foregoing amendments and remarks, all pending claims are believed to be allowable and the application is in condition for allowance. Therefore, a Notice of Allowance is respectfully requested. Should the Examiner have any further issues regarding this application, the Examiner is requested to contact the undersigned attorney for the applicants at the telephone number provided below.

Respectfully submitted,

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